



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,092	04/08/2004	Francisco Juarez	NOVE100041000	8981

22891 7590 01/28/2008
LAW OFFICE OF DELIO & PETERSON, LLC.
121 WHITNEY AVENUE
3RD FLOOR
NEW HAVEN, CT 06510

EXAMINER

MILLER, MICHAEL G

ART UNIT	PAPER NUMBER
----------	--------------

1792

MAIL DATE	DELIVERY MODE
-----------	---------------

01/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/821,092

Applicant(s)

JUAREZ ET AL.

Examiner

Michael G. Miller *MG M*

Art Unit

1792

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 16 January 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: _____

Claim(s) withdrawn from consideration: _____

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: Applicant's arguments were not found persuasive by Examiner.

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 16 January 2008 have been fully considered but they are not persuasive.
2. With regard to the argument against Claim 1, Applicant argues that '977 teaches that the vapor to be deposited must be placed into the chamber at its larger volume for deposition to occur. Examiner respectfully disagrees and points to paragraph 0071, which shows that at constant volume, the temperature of the vapor can be increased to increase its vapor pressure and thereby its deposition rate onto the substrate (the atmosphere of the chamber will only hold a maximum partial pressure of vapor before it starts to condense). This is evidence for a constant-volume condensation process. Further, as the volume expands at the end of the process, the partial pressure of the vapor will decrease and eventually fall below the saturation point, at which time deposition will cease. Therefore, '977 does teach a process where the chamber can be enlarged at the end of the deposition step to halt the reaction.
3. Applicant's arguments against Claims 2 and 8 are based entirely on the resolution of the argument against Claim 1. As Examiner respectfully disagrees with the argument against Claim 1, so to does the Examiner respectfully disagree with the arguments against Claims 2 and 8.
4. With regard to the argument against Claims 3-4, Applicant argues that '977 does not teach the use of gas or vacuum purging after the chamber has reached its second,

larger volume. Examiner respectfully disagrees. Paragraph 0054 teaches that the substrate can be cooled by expanding the volume of the chamber. Paragraph 0086 teaches that the chamber may be purged after cooling of the substrate, which as taught by PG0054 may be brought about by chamber expansion.

5. With regard to the argument against Claims 5 and 9, Applicant argues that '977 does not teach suitable structural requirements for the reactor assembly. Examiner respectfully disagrees. Applicant does not require that the platform be movable separately from other portions of the chamber. As shown in Figure 1, the support for the substrate will move up and down as the external chamber moves up and down, making the substrate support a platform movable between first and second positions.

6. Applicant's arguments against Claims 20-22 are based partially on the argument against Claim 1. Examiner respectfully disagrees that Claims 20-22 are not obvious over the prior art, as Examiner submits that '977 teaches the disputed portion of Claims 20-22. See above discussion of Claim 1.

7. In view of the foregoing, Examiner maintains all previous grounds of rejection as presented in the previous Office Action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael G. Miller whose telephone number is (571) 270-1861. The examiner can normally be reached on M-F 7-4.

Application/Control Number:
10/821,092
Art Unit: 1792

Page 4

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on (571) 272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MGM *MGM*

Michael Cleveland
SUPERVISORY PATENT EXAMINER
MICHAEL CLEVELAND